#### WESTERN AREA POWER ADMINISTRATION



# Fort Collins Utilities forges strong bond with large C&I customers

elping key accounts reduce energy or water consumption, shift load or install renewables can pay handsome dividends to utilities, both in terms of bottom line and goodwill. When a city has ambitious environmental and efficiency goals, as Fort Collins, Colorado, does, providing energy services to large commercial and industrial (C&I) customers can turn them into much needed allies.

Fort Collins adopted a Climate Action Plan in 2015, a roadmap for reducing greenhouse gas emissions and energy consumption below 2005 levels by 2020. The city aims to reduce overall energy consumption by 20 percent from the 2005 baseline, achieve a 20-percent reduction in kBtu per square foot in city facilities and reduce peak demand by 15 percent.

Fort Collins Utilities serves 70,000 meters including 32 key accounts—the top 15 business customers in electricity and water revenues. Fast-growing accounts that are poised to move into the

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Subscribe to Energy Services Bulletin at esnews.wapa.gov/ wordpress/subscribe Top 15, customers with large service agreements and businesses that have a strong influence in the community are also considered key accounts. Those customers represent 40 percent of the utility's annual electricity sales, 30 percent of its total revenue and a big opportunity for significant savings.

#### Mission in two parts

The savings potential from key accounts is the reason Fort Collins Utilities has offered a business customer program in some form since the 1990s. In its current iteration, two representatives service 15 accounts each, ranging from breweries to manufacturing facilities to a world-class university. "The representatives are in contact with their customers on a nearly daily basis, especially some of the larger partners," said Customer Accounts Manager Lucas Mouttet.

That might seem excessive at first glance, but there is more to customer service than promoting energy efficiency upgrades and cutting rebate checks. "Their job is to make sure our customers are aware of, and taking full advantage of, our energy efficiency and water programs," Mouttet said. "But maximizing customer satisfaction is just as important."

To that end, representatives may discuss contracts and agreements on capacity with a manufacturing facility, water conservation measures with a brewery or building design problems with real estate developers. The key accounts program also ensures that the customer's voice is treated as integral to achieving the utility's internal goals, Mouttet added.

### Many paths to savings, satisfaction

The program options available to business customers are as varied as the city's goals are ambitious. Under the umbrella of Efficiency Works, Fort Collins teamed up with Estes Park Light & Power, Longmont Power & Communications, Loveland Water and



The Efficiency Works team presents a large rebate check to Anheuser-Busch for a large lighting retrofit project. From left to right: Dennis Wallisch of Anheuser-Busch; Sharon Held, formerly with Fort Collins Utilities; Adam Perry of Platte River Power Authority; a representative from Anheuser-Busch; and Kelley Gonzales, formerly with Fort Collins Utilities. (Photo by City of Fort Collins Utilities)

Power and Platte River Power Authority to provide rebates and technical assistance.

Building owners and design teams in the utility's territory can participate in the Integrated Design Assistance Program for new construction and major renovation. Project teams set a Target Energy Usage Index early in the project using the Energy Star Target Finder and then design and build to that target.

The industry-specific program allows key account representatives to tailor an efficiency improvement plan that saves money and enhances performance for food service, grocery or office businesses. Food service rebates focus on cooking and ventilation equipment, grocery rebates focus on refrigeration equipment and office rebates focus on computer equipment and control systems.

Fort Collins and Xcel Energy are collaborating on an innovative new program to test the idea of "upstream"

rebates for heating, ventilation and cooling (HVAC) systems. HVAC wholesalers receive a rebate to stock only high-efficiency systems, and pass that through to consumers so that they end up paying what they would have for the unit if they received the rebate directly.

Lighting upgrades continue to be a popular choice with business customers, large and small. "About 40 percent of our commercial account rebates are issued for lighting upgrades," Mouttet acknowledged. "With the short payback period, those projects are easy to understand and justify."

#### **Really big savings**

But a 2014 project completed with Anheuser-Busch demonstrates that lighting can be more—a lot more—than just a quick upgrade. The brewer of Budweiser is one of Fort Collins's largest accounts and an avid participant in its efficiency programs.

This particular project focused on

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The Anheuser-Busch Brewery in Fort Collins, Colorado, has frequently taken advantage of the utility's business customer rebates to make deep energy-efficiency retrofits. (Photo by City of Fort Collins Utilities)

reducing energy use in a 600,000-square foot warehouse. Conventional light bulbs were replaced with LED lamps—lightemitting diodes—and motion sensors were installed. "Now when a forklift rolls across the floor with a pallet, you can see the lights come on in front of it and turn off behind it," said Mouttet.

The target savings for the project of \$113,602 and 2.4 million kilowatt-hours annually will come in part from installing high-efficiency LEDs. The motion sensors deepen the savings by reducing the running time of the lights by 50 percent. The rebate check on the \$900,000 project ran into thousands of dollars.

That is a lot of money for a utility to spend on reducing demand, but there are advantages, Mouttet pointed out, particularly for a municipal power provider. It supports the city's Climate Action Plan, helps keep local businesses healthy and aids in capacity planning. "Efficiency is not a silver bullet," he acknowledged. "We are having the

same kind of conversations as other utilities today. But it continues to be one of the better capital investments."

#### What it takes

Utilities hoping to capture the benefits of large C&I efficiency upgrades—including customer satisfaction—must first look at how they approach business efficiency programs. The needs of an Anheuser-Busch differ from the brew pub on the corner, so the skills of a key account representative will be different from those of a business customer service representative.

Small-business representatives, like their residential counterparts, tend to focus more on on-site problem solving, Mouttet observed. "They work with their customers to get an electric bill under control or even go door-to-door during an outage," he said. "The projects they implement are usually smaller and quickly completed, like installing some new windows, adding insulation or changing out inefficient light bulbs."

Key account representatives, on the other hand, are often shepherding long-term projects over the course of many months. "Project management skills are critical," Mouttet insisted. "Neither position requires a technology expert, but key account managers often have to go beyond knowing who to call. They have to be able to figure out how to get a big, complex job finished before the end of the year."

Both positions call for strong people skills and a collaborative nature, however, because customer service is about facilitating conversations and solving problems, Mouttet stated. "They have to be good at networking, at connecting the right people quickly," he said.

Likewise, a successful customer service program, whether for large or small customers, must connect the utility—the internal—and the community—the external. Build a strong bond, and both parties will prosper and reach their goals.

# Roseville customers get solar advice they can trust

ecognizing customer needs in the growing residential solar market, Roseville Electric Utility has developed a program to help homeowners make sound decisions about installing solar systems and, in the process, is increasing customer satisfaction.

Solar installers are now marketing more aggressively to consumers who are definitely interested but want to be better informed before investing in a system. This creates an opening for utilities to become trusted energy advisors, said Alanya Schofield, a senior director at consulting firm E Source.

Schofield made her remarks at the American Public Power Association's (APPA) Public Power Forward summit in November and participated in a panel that included Roseville Electric Utility Director Michelle Bertolino. Public Power Forward is an APPA strategic initiative to help public power utilities prepare for a new era in electricity.

#### Seeing, meeting need

California passed a law in 2015 requiring utilities to get 50 percent of their electricity from renewables by 2030, increased from the previous goal of 33 percent by 2020. Many public power utilities in the state, however, have been proactively encouraging clean power and energy efficiency for years. Roseville Electric Utility's Trusted Solar Advisor program is just the latest among many examples.

Roseville Electric Utility launched the program in April 2014, in response to the growing number of customers calling with questions about installing solar arrays. A promotional campaign and workshops followed to introduce the website to customers.

#### **Educating first**

The website provides a starting point for customers who are trying to figure out if solar is right for them. A solar calculator—the WattPlan created by Clean Power Research—allows customers to make cost-benefit comparisons based on electricity use, generation, financing options and system size.

Visitors will also find frequently asked questions and information about rebates Roseville offers for solar installation. The Trusted Solar Advisor stresses the importance of doing efficiency upgrades first, and links to a DIY Home Energy Analyzer.

#### Install when ready

Once a customer decides to go forward with a solar installation, the permitting process begins. Roseville customers can download the residential PV packet and find links to residential and business installation and interconnection forms.

Rather than maintain an approved contractor list, the utility provides helpful resources. The website includes links to Go Solar California, sponsored by the California Energy Commission, and the Contractor State Licensing Board so that customers can ensure their contractors have a valid license.

Staying neutral and staying current are the keys to gaining customer trust, noted Energy Program Technician David Dominguez. "We focus on



making sure we give our customers the most relevant and up-to-date information," he said. "That allows them to come to their own conclusions."

Dominguez, who handles the utility's retrofit solar interconnections, is the Trusted Solar Advisor and he was answering customers' solar questions before Roseville created the program. Some customers just feel more comfortable talking to a representative, or they may still have questions after visiting the website, Dominguez acknowledged. "But now, with the website, when people call, they often have a much better idea of what they need to know."

## **Equipment Loan Program changes with the times**

hris Lyles, who took over as the new manager of WAPA's Equipment Loan Program in August, is making some updates to the popular program that reflect the changing needs of our customers, as well as advances in technology.

#### Planning the future

The increasing availability of easy-to-use diagnostic tools is prompting Lyles to look at new ways the Equipment Loan Program can support WAPA customers. "It's possible now to walk into Home Depot and pick up a pocket-sized infrared (IR) camera for a few hundred dollars that will serve the purpose for a home energy audit," he observed. "So we are asking ourselves what other needs our customers have that the program can meet."

One answer is to stock more sophisticated versions of consumer-level tools for linemen and electricians to use for industrial audits and transmission and distribution system maintenance. The boroscope, for example, allows the user to take thermal images in tight spaces where just pointing and shooting with an IR camera might fail to pinpoint the problem. Utility field crews can use the LineTracker power monitor to diagnose fast-moving and minute malfunctions in overhead lines.

Providing instruction on the proper use of borrowed equipment is another one of Lyles's goals.
Currently, customers can find general equipment training resources on the Energy Services website, but Lyles has something more specific in mind. WAPA plans to produce videos that

explain how to use the equipment, and post them on WAPA's YouTube channel. The URLs will be sent to customers in place of physical manuals when they borrow a tool, providing a quicker, easier start when using the equipment. Perhaps most importantly, the customized videos will give customers a more personal connection to Energy Services and WAPA.

#### Help shape the program

The Equipment Loan Program and Energy Services have always provided WAPA customers with a direct line to technical assistance and support for their maintenance, load management and planning needs. Those needs have evolved—a slow-sounding word for the rapid-fire change occurring in our industry—and we want to make sure our services keep pace. Your input, suggestions and feedback are crucial to the direction the program takes.

Tell us what kinds of tools you would like to see added to our library. "Our equipment inventory should reflect that we understand the

changes going on in the industry and that we know how to help our customers deal with them," Lyles explained. If you know of an online resource that gave you a better understanding of a borrowed tool, share that with Energy Services. The same goes for that clever solution you discovered while using it. The Equipment Loan

Program is your program and we are eager to hear how we can better serve you.

The Equipment Loan
Program stocks infrared cameras,
power meters and other diagnostic
tools for WAPA customers to borrow
free of charge.

### **EPTC launches new registration system**

igning up for a quality training course at WAPA's Electric Power Training Center is now easier than ever. The EPTC is implementing a new, streamlined registration process with RegOnline, an event management platform.

EPTC instructor J Agee teaches a class on power plant operations. Attendees put their knowledge to work in problem solving exercises on the Miniature Power System. (Photo by Travis Weger, Western Area Power Administration)

The EPTC offers one-of-a-kind power system operations training in Golden, Colorado. Courses cover the principles and operation of power generation, transmission and interconnected system operations complete with unique, hands-on exercises with powerful simulation tools.

The North American Electric Reliability Corporation recognizes the EPTC as a continuing education provider that adheres to NERC Continuing Education Program Criteria. "However, our comprehensive range of courses can benefit everyone from power plant operators to support staff," said Randy Manion, acting EPTC program manager.

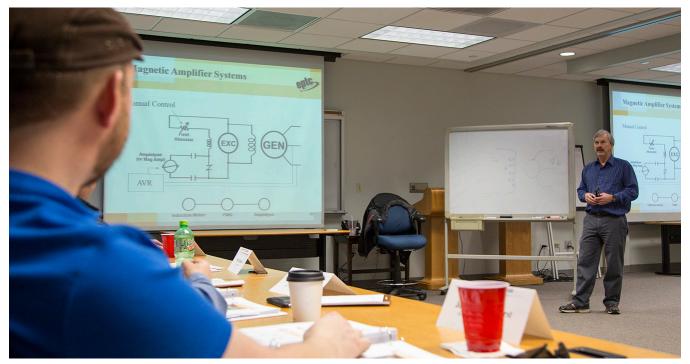
The new registration system enables attendees to pay for courses online—a previously unavailable option—and provides EPTC and students with an emailed receipt. Here is how the new system works:

To get started, users select "Register for EPTC courses" You are leaving WAPA.gov. from the navigation menu, same as before.

- On the grid listing all available training courses, click the "register" button to the right of the chosen class.
- Fill in your email and hit continue.
- Fill in your personal information including your supervisor's email and your regional block code. There is a space at the bottom of the form for those completing it on behalf of another employee. Hit "Add another person" or "Continue."
- Scroll down the checkout screen and hit the "Finish" button. Unless you select "Finish," you will not be registered.

The system will then send you an invoice with payment details, and send confirmation to the EPTC.

Please let us know if you have any difficulties with RegOnline, or any suggestions to improve the experience.



EPTC instructor J Agee teaches a class on power plant operations. Attendees put their knowledge to work in problem solving exercises on the Miniature Power System. (Photo by Travis Weger, Western Area Power Administration)

## New Year offers many educational opportunities

hanges and challenges are coming to the utility industry in 2017, along with plenty of new tools and innovative approaches you can use to not only manage but master the shifting landscape. Here are some upcoming workshops and courses to help you prepare for what the New Year has in store:

#### Utility Scale Storage Battery Investments: The Technology, Challenges and Business Case Feb. 7-8, 2017 San Francisco, CA

Storage batteries have been around for a while, but integrating them into transmission and distribution systems is new territory for electric utilities. Until recently, it was difficult to make a business case for investing in utility-scale storage. However, the integration of more intermittent and non-dispatchable resources into utility portfolios is changing the cost-benefit equation. Storage batteries provide high-speed response, controllability, modularity, scalability, expandability, flexibility and transportability—exactly the attributes utilities are going to need for the foreseeable future.

This seminar provides an overview and guided tour of proven battery technologies from different manufacturers, challenges of interconnection, investment requirements, typical storage battery power purchase agreements, settlement equations and investment guidelines. The seminar materials cover the full spectrum of applications for utilities, regulatory agencies, project developers, private investors, finance firms, wholesale market participants and owners of wind and solar power plants.

The International Association for

Continuing Education and Training (IACET) has authorized energy training and consulting firm EUCI You are leaving WAPA.gov. to offer one continuing education unit for the course. Attendees will also receive a copy of the presentations and other reference materials.

### Introduction to Forecasting for Utility/Power Industry Professionals

#### Feb. 7-8, 2017 New Orleans, Louisiana

Load forecasting has always been an invaluable tool for helping utilities manage uncertainty. But pre-computer era forecasting practices do not account for a host of bewildering conditions that now affect electricity use. Changes in the mix of supply- and demand-side resources, the impact of technology on the grid and access it allows to system and customer data and dramatic shifts in commodity prices are just a few of the factors that traditional methodologies are failing to capture.

Fortunately, new forecasting methods have been developed to address challenges such as demand forecasting, renewable generation forecasting and price forecasting. This course offers an introduction to modernized forecasting principles, practices and their applications in the utility industry. It will be loaded with examples and illustrations that

translate these methodologies into the resulting utility practices.

Attendees will get the essential tools for making sense of today's power environment and delivering proper guidance for industry decision-makers. An IACET credit is also available for this class.

#### AESP National Conference 2017 Feb. 13-16, 2017 Orlando, Florida

"Destination Innovation" is the theme of the 27th annual conference of the Association for Energy Services Professionals. This event draws top program managers, policy makers, implementers, marketers, evaluators, consultants and vendors in energy efficiency. The extensive agenda will cover the range of current topics in marketing, tools and technology, implementation, program design, research, evaluation and more.

In addition to speaker presentations, panel discussions and networking events, this year's conference offers pre-conference training courses.

Attendees can either focus on program planning, design and implementation or brush up on their critical thinking skills, while earning .5 CEU.

#### 2017 PACENation Summit Denver, Colorado Feb. 13-15, 2017

New and innovative versions of property-assessed clean energy (PACE) legislation and programs are gaining support across the country. Learn more about this 100-percent voluntary strategy to fund energy upgrades to buildings while creating jobs, increasing property value and making progress on state policy goals.

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The second annual Summit will offer an in-depth look into the growth in residential PACE financing, new PACE products, strategies and programs in development and more.

Newcomers and PACE practitioners alike can will benefit from the opening workshop, PACE 101 Workshop.

Presentations will cover legislation to project implementation, including best practices in legislation, local ordinances, program design, financing options, marketing to building owners and training of contractors. Add a wide range of sessions led by PACE experts and an abundance of networking opportunities, and you have a crash course on a valuable tool for growing energy efficiency in your community.

#### Utility Energy Forum May 3-5, 2017 Santa Rosa, California

Program development and networking are central to the Utility Energy Forum, now in its 37th year. The sessions will challenge traditional thinking and ask attendees how they are preparing for a different energy utility industry than the one they knew.

This year's theme, "Change is the Only Constant – Customers, Policy and Technology," is appropriate not only for our industry, but also for the new location. The Hilton Sonoma, in Santa Rosa near California's wine country, will host the forum. What hasn't changed, however, are the sessions "ripped from today's headlines" (or rather, from our daily experiences), the outstanding speaker roster, and the abundance of networking opportunities. WAPA Energy Services representatives will be there, too, and we look forward to some face-to-face time with our customers.

### E Design 2020: Accelerating Utility Innovation for the New Energy Consumer

#### May 10-11, 2017 San Francisco, California

This first-of-its-kind event focuses on creating utility products, services and experiences for the customer of today and tomorrow. Forward-thinking utility leaders and experts from outside the utility space will explore innovative approaches and design-oriented experiences from a variety of industries to demonstrate how these strategies can be applied at utilities. E Design 2020 askes attendees to leave their comfort zone, uncover high-potential partnerships and discover ways to embrace technological changes that will affect residential and nonresidential customers.

After introducing attendees to the design-oriented approach, the comprehensive agenda covers distributed energy, demand-side management, energy services, technology and targeted customer programs. The event highlights empathetic thinking to discover customers' underlying needs and find new ways of developing products and services that will turn customers into allies.

#### Learn from past, shape future

It is not too late to benefit from some of the excellent training events of 2016, either. Presentations from the previous Utility Energy Forum and Rocky Mountain Utility Efficiency Exchange are available online.

You can also download materials from the Behavior, Energy & Climate Change Conference (BECC), presented annually by the American Council for an Energy Efficient Economy (ACEEE). The conference looks at human behavior and decision-making and how to use the knowledge to accelerate the transition to an energy-efficient and low-carbon future. The session abstracts and some PowerPoint presentations are available for free, or you can buy the full proceedings.

This is the time to let ACEEE know what you would like to see on the 2017 BECC agenda. ACEEE will issue the call for abstracts Feb. 10 for presentations that:

- Identify key lessons about behavior and decision making that advance energy/climate solutions
- Help integrate research insights throughout the value chains of energy-using goods and services
- Expand support for social science research as applied to the biggest contributors to today's energy challenges
- Facilitate knowledge accumulation, exchange and collaboration across analytical approaches from micro to macro (e.g., individual, group, organizational, societal behavior, and decision making)

Even if you can't make it to any of these events, you still have plenty of options in online education. From the Community Solar Value Project to webinars presented by the Energy Department's Better Buildings Initiative to the American Public Power Association DEED program. Make it your New Year's resolution to check the events calendar on the Energy Services home page regularly and take time to expand your professional horizons.



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